

**Cornea Image Analysis Reading Center (CIARC)  
Publications List – July 2024**

1. Lass JH, Reinhart WJ, Bruner WE, Kachmer ML, Lomeo MD, Morgan KM, Glavan I, and Sanders DR: Comparison of corneal storage in K-Sol and Chondroitin Sulfate Corneal Storage Medium in human corneal transplantation. *Ophthalmology* 96:688-697, 1989.
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12. Price MO, Bidros M, Gorovoy M, Price FW, Jr., Benetz BA, Menegay HJ, Debanne SM, Lass JH: Effect of incision width on graft survival and endothelial cell loss after DSAEK. *Cornea* 29:523-27, 2010.
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14. Price MO, Knight O, Benetz, BA, Debanne SM, Verdier D, Rosenwasser G, Rosenwasser M, Price FW, Jr., Lass JH: Randomized, prospective, single-masked clinical trial of endothelial keratoplasty performance with two donor cornea 4° storage solutions and associated chambers". *Cornea* 34:253-56, 2015.
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28. Wisely CE, Sheng H, Heah T, Kim T. Effects of netarsudil and latanoprost alone and in fixed combination on corneal endothelium and corneal thickness: Post-hoc analysis of MERCURY-2. *Adv Ther* 37:1114-23, 2020 (*Cornea Image Analysis Reading Center acknowledged as the reading center for this study*)
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30. Joseph NM, Benetz BA, Menegay H, Oellerich S, Baydoun L, Melles G, Lass JH, and Wilson D. Early detection of at-risk keratoplasties and prediction of future corneal graft rejection from pre-diagnosis endothelial cell images. *Proc. SPIE* 11597, *Medical Imaging 2021: Computer-Aided Diagnosis*, 115972C (18 February 2021) [doi.org/10.1117/12.2582171](https://doi.org/10.1117/12.2582171)
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38. Benetz, BA, Shivade VS, Joseph NM, Romig NJ, McCormick JC, Chen J, Titus MS, Sawant OB, Clover JM, Yoganathan N, Menegay HJ, O'Brien RC, Wilson DL, Lass JH. Automatic determination of endothelial cell density from donor cornea endothelial images. *Transl Vis Sci Technol* In press.

NEI-sponsored Specular Microscopy Ancillary Study (SMAS) of the Cornea Donor Study (CDS) manuscripts with CIARC

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2. Benetz BA, Gal RL, Ruedy KJ, et al. Specular microscopy ancillary study methods for donor endothelial cell density determination of Cornea Donor Study images. *Curr Eye Res* 31(4):319-27, 2006.
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12. Lass JH, Benetz BA, and Gal R, et al: Donor age and factors related to endothelial cell loss ten years after penetrating keratoplasty: Specular Microscopy Ancillary Study. *Ophthalmology* 120:2428-35, 2013.
13. Sugar A, Gal RL, Kollman C, Raghinaru D, Dontchev M, Croasdale CR, Feder RS, Holland EJ, Lass JH, Macy JI, Mannis MJ, Smith PW, Soukiasian SH, Beck RW for the Cornea Donor Study Investigator Group. Factors Predictive of Corneal Graft Survival in the Cornea Donor Study. *JAMA Ophthalmology* 2014; Published online October 16, 2014. doi:10.1001/jamaophthalmol.2014.3923. 133:246-54, 2015
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1. Lass JH, Szczotka-Flynn LB, Ayala A, Benetz BA, Gal RL, Aldave AJ, Corrigan M, Dunn S, Kollman C, McCall T, Pramanik S, Rosenwasser G, Ross K, Terry M, Verdier DD, Beck R for the Cornea Preservation Time Study Group: Cornea Preservation Time Study: Methods and impact on the cornea donor pool in the United States. *Cornea* 34:601-08, 2015
2. Lass JH, Benetz BA, Verdier DD, Szczotka-Flynn LB, Ayala AR, Liang W, Aldave AJ, Dunn SP, Ross KW, Mian SI, Patel SV, Rosenwasser GO, Terry MA, Kollman C, Gal RL, Beck R. Corneal endothelial cell loss 3 years after successful Descemet's Stripping Automated Endothelial Keratoplasty in the Cornea Preservation Time Study. *JAMA Ophthalmology* 135:1394-1400, 2017.
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5. Hannush SB, Drury D, Aldave AJ, Cohen NJ, Szczotka-Flynn LB, Ayala AR, Maguire MG, Berdy GJ, Lee WB, Macsai MS, Meinecke EE, Mian SI, Nordlund ML, Rosenwasser G OD, Ross KW,

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Sugar A, Terry MA, Tu EY, Van Meter WS, Lass JH on behalf of the Cornea Preservation Time Study Group. Impact of the Cornea Preservation Time Study on donor cornea preservation time and surgeon attitudes. *Int J Eye Banking* 6:1-12, 2018.

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10. Lass JH, Bailey R, Szczotka-Flynn LB, Benetz BA, Soper M, Titus M, Kollman C, Beck R on behalf of the Cornea Preservation Time Study Group. Comparison of graft outcomes reusing original intermediate term cold storage solution for entire corneal donor storage period with exchanged fresh storage solution following donor preparation in the Cornea Preservation Time Study. *Cornea*. 41:1539-44, 2022. PMID 36036663

### Chapters and Reviews

1. Benetz B, Yee R., Bidros, M, and Lass J: Specular Microscopy. In: *Cornea: Fundamentals, Diagnosis, Management*. Edited by Krachmer JH, Mannis MJ, and Holland, EJ. 3rd edition. Chapter 14. Mosby. 2011. pp. 177-203.
2. Sayegh R, Benetz B, and Lass J: Specular Microscopy. In: *Cornea: Fundamentals, Diagnosis, Management*. Edited by Mannis MJ and Holland, EJ. 4th edition. Elsevier Chapter 14. 2016. pp. 160-179.
3. Gray K, Benetz BA, Stoeger C, Lass J: Current and New Technologies in Corneal Donor Tissue Evaluation: Comparative Image Atlas. *Cornea*.

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37(6)S1-36, 2018 supplement to June 2018 edition PMID 29724201, 29734202, 29734203, 29734204, 29734205, 29734206

4. Price MO, Lass JH, Price FW, Jr.: Clinical factors for early and late endothelial cell loss after corneal transplantation. 2018. Edited by Perez V, Hamrah P, and Yamaguchi T. *Current Ophthalmology Reports*. Springer Nature. Philadelphia, PA <https://doi.org/10.1007/s40135-018-0179-y>.
5. Lass JH, Omar AF, Benetz BA: Endothelial cell loss after keratoplasty. *The Corneal Endothelium*. Winter report of the French Ophthalmology Society. Edited by Thuret G. 2020 Elsevier/Masson.
6. Benetz BA, and Lass JH: Specular Microscopy. In: *Cornea: Fundamentals, Diagnosis, Management*. Edited by Mannis MJ and Holland, EJ. 5th edition. 2021 Elsevier. London. Chapter 13 p. 130-151.